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~~200606~~ 10/777,430

FILE 'HOME' ENTERED AT 14:55:06 ON 24 JUN 2003

=> file biosis medline caplus wpids uspatfull
COST IN U.S. DOLLARS
FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
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FILE 'USPATFULL' ENTERED AT 14:55:31 ON 24 JUN 2003
CA INDEXING COPYRIGHT (C) 2003 AMERICAN CHEMICAL SOCIETY (ACS)

*** YOU HAVE NEW MAIL ***

=> s oligonucleotide? or nucleic acid?
L1 584043 OLIGONUCLEOTIDE? OR NUCLEIC ACID?

=> s l1 and terminal (6a) charge (5a) phospho? (9a) label?
4 FILES SEARCHED...
L2 3 L1 AND TERMINAL (6A) CHARGE (5A) PHOSPHO? (9A) LABEL?

=> d 12 bib abs 1-3

L2 ANSWER 1 OF 3 USPATFULL
AN 2003:106233 USPATFULL
TI Compositions and methods for the therapy and diagnosis of pancreatic cancer
IN Benson, Darin R., Seattle, WA, UNITED STATES
Kalos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)
PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17

09567863

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 14253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 2 OF 3 USPATFULL

AN 2002:272801 USPATFULL

TI Compositions and methods for the therapy and diagnosis of colon cancer

IN Stolk, John A., Bothell, WA, UNITED STATES

Xu, Jiangchun, Bellevue, WA, UNITED STATES

Chenault, Ruth A., Seattle, WA, UNITED STATES

Meagher, Madeleine Joy, Seattle, WA, UNITED STATES

PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

PI US 2002150922 A1 20021017

AI US 2001-998598 A1 20011116 (9)

PRAI US 2001-304037P 20010710 (60)

US 2001-279670P 20010328 (60)

US 2001-267011P 20010206 (60)

US 2000-252222P 200001120 (60)

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300, SEATTLE, WA, 98104-7092

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 3 USPATFULL

AN 2002:243051 USPATFULL

TI Compositions and methods for the therapy and diagnosis of ovarian cancer

IN Algata, Paul A., Issaquah, WA, UNITED STATES

Jones, Robert, Seattle, WA, UNITED STATES

Harlocker, Susan L., Seattle, WA, UNITED STATES

PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

PI US 2002132237 A1 20020919

AI US 2001-867701 A1 20010529 (9)

PRAI US 2000-207484P 20000526 (60)

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,

SEATTLE, WA, 98104-7092

CLMN Number of Claims: 11

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 12 kwic

L2 ANSWER 1 OF 3 USPATFULL

SUMM . . . the steps of: (a) contacting a biological sample, e.g., tumor sample, serum sample, etc., obtained from a patient with an **oligonucleotide** that hybridizes to a polynucleotide that encodes a polypeptide of the present invention; (b) detecting in the sample a level of a polynucleotide, preferably mRNA, that hybridizes to the **oligonucleotide**; and (c) comparing the level of polynucleotide that hybridizes to the **oligonucleotide** with a predetermined cut-off value, and therefrom determining the presence or absence of a cancer in the patient. Within certain embodiments, the amount of mRNA is detected via polymerase chain reaction using, for example, at least one **oligonucleotide** primer that hybridizes to a polynucleotide encoding a polypeptide as recited above, or a complement of such a polynucleotide. Within other embodiments, the amount of mRNA is detected using a hybridization technique, employing an **oligonucleotide** probe that hybridizes to a polynucleotide that encodes a polypeptide as recited above, or a complement of such a polynucleotide.

SUMM . . . a cancer in a patient, comprising the steps of: (a) contacting a biological sample obtained from a patient with an **oligonucleotide** that hybridizes to a polynucleotide that encodes a polypeptide of the present invention; (b) detecting in the sample an amount of a polynucleotide that hybridizes to the **oligonucleotide**; (c) repeating steps (a) and (b) using a biological sample obtained from the patient at a subsequent point in time; . . .

SUMM . . . to a polypeptide as described above, as well as diagnostic kits comprising such antibodies. Diagnostic kits comprising one or more **oligonucleotide** probes or primers as described above are also provided.

SUMM [2043] SEQ ID NO:2003 is the determined cDNA sequence of clone 61496359

DETD . . . to generate a plasmid library in *E. coli*. Individual *E. coli* colonies were isolated and the cDNA clones subjected to **nucleic acid** sequencing. The nucleotide sequences of exemplary clones are disclosed herein as SEQ ID NOS:1-66, 75-152, 174-177, 182, 184-452, 454-4550. The . . .

CLM What is claimed is:

8. An **oligonucleotide** that hybridizes to a sequence recited in SEQ ID NOS:1-66, 75-152, 174-177, 182, 184-452, and 454-4550 under moderately stringent conditions.

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patient, comprising the steps of: (a) obtaining a biological sample from the patient; (b) contacting the biological sample with an oligonucleotide according to claim 8; (c) detecting in the sample an amount of a polynucleotide that hybridizes to the oligonucleotide; and (d) comparing the amount of polynucleotide that hybridizes to the oligonucleotide to a predetermined cut-off value, and therefrom determining the presence of the cancer in the patient.

15. A diagnostic kit comprising at least one oligonucleotide according to claim 8.

=> d his

(FILE 'HOME' ENTERED AT 14:55:06 ON 24 JUN 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:55:31 ON
24 JUN 2003

L1 584043 S OLIGONUCLEOTIDE? OR NUCLEIC ACID?
L2 3 S L1 AND TERMINAL (6A) CHARGE (5A) PHOSPHO? (9A) LABEL?

=> s 11 and positiv? (3a) moiet?
L3 318 L1 AND POSITIV? (3A) MOIET?

=> s 13 and phosphate group?
L4 88 L3 AND PHOSPHATE GROUP?

=> s 14 and dye
L5 60 L4 AND DYE

=> s 15 and phosphate (4a) positi? (4a) dye
4 FILES SEARCHED...
L6 0 L5 AND PHOSPHATE (4A) POSITI? (4A) DYE

=> s 13 and phosphate(5a) positi? (5a) dye?
L7 1 L3 AND PHOSPHATE(5A) POSITI? (5A) DYE?

=> d 17 bib abs

L7 ANSWER 1 OF 1 USPATFULL
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algate, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Compositions and methods for the therapy and diagnosis of cancer,
particularly ovarian cancer, are disclosed. Illustrative compositions

comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 17 bib abs kwic

L7 ANSWER 1 OF 1 USPATFULL
 AN 2002:243051 USPATFULL
 TI Compositions and methods for the therapy and diagnosis of ovarian cancer
 IN Algata, Paul A., Issaquah, WA, UNITED STATES
 Jones, Robert, Seattle, WA, UNITED STATES
 Harlocker, Susan L., Seattle, WA, UNITED STATES
 PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
 PI US 2002132237 A1 20020919
 AI US 2001-867701 A1 20010529 (9)
 PRAI US 2000-207484P 20000526 (60)
 DT Utility
 FS APPLICATION
 LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
 SEATTLE, WA, 98104-7092
 CLMN Number of Claims: 11
 ECL Exemplary Claim: 1
 DRWN No Drawings
 LN.CNT 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

SUMM . . . the steps of: (a) contacting a biological sample, e.g., tumor sample, serum sample, etc., obtained from a patient with an **oligonucleotide** that hybridizes to a polynucleotide that encodes a polypeptide of the present invention; (b) detecting in the sample a level of a polynucleotide, preferably mRNA, that hybridizes to the **oligonucleotide**; and (c) comparing the level of polynucleotide that hybridizes to the **oligonucleotide** with a predetermined cut-off value, and therefrom determining the presence or absence of a cancer in the patient. Within certain embodiments, the amount of mRNA is detected via polymerase chain reaction using, for example, at least one **oligonucleotide** primer that hybridizes to a polynucleotide encoding a polypeptide as recited above, or a complement of such a polynucleotide. Within other embodiments, the amount of mRNA is detected using a hybridization technique, employing an **oligonucleotide** probe that hybridizes to a polynucleotide that encodes a polypeptide as recited above, or a complement of such a polynucleotide.

SUMM . . . a cancer in a patient, comprising the steps of: (a) contacting a biological sample obtained from a patient with an **oligonucleotide** that hybridizes to a polynucleotide that encodes a polypeptide of the present invention; (b) detecting in the sample an amount of a polynucleotide that hybridizes to the

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oligonucleotide; (c) repeating steps (a) and (b) using a biological sample obtained from the patient at a subsequent point in time; . . .

SUMM . . . to a polypeptide as described above, as well as diagnostic kits comprising such antibodies. Diagnostic kits comprising one or more oligonucleotide probes or primers as described above are also provided.

SUMM [2043] SEQ ID NO: 2004 represents the cDNA sequence for clone AA165409.

CLM What is claimed is:

1. patient, comprising the steps of: (a) obtaining a biological sample from a patient; (b) contacting the biological sample with an oligonucleotide that hybridizes to a sequence set forth in any one of SEQ ID NO: 1-10,912 under highly stringent conditions; (c) detecting in the sample an amount of a polynucleotide that hybridizes to the oligonucleotide; and (d) comparing the amount of polynucleotide that hybridizes to the oligonucleotide to a predetermined cut-off value, and therefrom detecting the presence of ovarian cancer in the patient.

2. The method of claim 1, wherein said detecting in the sample an amount of a polynucleotide that hybridizes to the oligonucleotide is performed by a polymerase chain reaction.

6. An oligonucleotide useful in the detection of ovarian cancer in a patient, wherein said oligonucleotide hybridizes to a sequence set forth in any one of SEQ ID NO: 1-10,912 under highly stringent conditions.

7. A diagnostic kit comprising at least one oligonucleotide according to claim 6.

=> d his

(FILE 'HOME' ENTERED AT 14:55:06 ON 24 JUN 2003)

FILE 'BIOSIS, MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 14:55:31 ON 24 JUN 2003

L1 584043 S OLIGONUCLEOTIDE? OR NUCLEIC ACID?
L2 3 S L1 AND TERMINAL (6A) CHARGE (5A) PHOSPHO? (9A) LABEL?
L3 318 S L1 AND POSITIV? (3A) MOIET?
L4 88 S L3 AND PHOSPHATE GROUP?
L5 60 S L4 AND DYE
L6 0 S L5 AND PHOSPHATE (4A) POSITI? (4A) DYE
L7 1 S L3 AND PHOSPHATE(5A) POSITI? (5A) DYE?

=> s 11 and phosph? (5a) positi? (5a) dye?

4 FILES SEARCHED...

L8 30 L1 AND PHOSPH? (5A) POSITI? (5A) DYE?

=> dup rem 18

PROCESSING COMPLETED FOR L8

L9 29 DUP REM L8 (1 DUPLICATE REMOVED)

=> s 19 not 12

L10 26 L9 NOT L2

=> s 110 not 17

L11 26 L10 NOT L7

=> d 111 bib abs 1-26

L11 ANSWER 1 OF 26 BIOSIS COPYRIGHT 2003 BIOLOGICAL ABSTRACTS INC.
 AN 1985:425009 BIOSIS
 DN BA80:95001
 TI OLIGONUCLEOTIDES COVALENTLY LINKED TO INTERCALATING AGENTS
 INFLUENCE OF POSITIVELY CHARGED SUBSTITUENTS ON BINDING TO COMPLEMENTARY
 SEQUENCES.
 AU ASSELIN U; THUONG N T; HELENE C
 CS CENTRE DE BIOPHYSIQUE MOLECULAIRE, 45045 ORLEANS CEDEX, FRANCE.
 SO J BIOL CHEM, (1985) 260 (15), 8936-8941.
 CODEN: JBCHA3. ISSN: 0021-9258. QD501.J7
 FS BA; OLD
 LA English
 AB A pentamethylene chain was used to covalently link the 3'-phosphate of oligothymidylates to the 9-amino group of an acridine derivative. Positively charged substituents were further attached to the 3'-phosphate group to form 3'-phosphotriesters. These molecules form specific complexes with poly(rA) which involve the formation of a number of A .cntdot. T base pairs equal to that of thymines in the oligonucleotide. Absorption changes induced in the acridine absorption bands are similar to those expected upon intercalation of the acridine dye between A .cntdot. T base pairs. The acridine covalently linked to the 3'-phosphate strongly stabilizes the complexes formed with poly(rA) as compared with the corresponding unsubstituted oligodeoxynucleotide. The presence of a positively charged substituent on the 3'-phosphate together with the acridine dye further enhances the interaction. The effect of salt concentration on complex stability depends on the number of negatively charged phosphate groups of the oligodeoxynucleotide and on the nature of the substituents borne by the 3'-phosphate group. When the oligothymidylate is substituted by an acridine dye, the stability of the poly(rA) complexes increases when salt concentration increases. If an additional positively charged substituent is present on the 3'-phosphate group, stability decreases when salt concentration increases for the shortest oligonucleotide (trimer) and increases with longer oligonucleotides. Thermodynamic parameters were calculated from the concentration dependence of melting temperatures.

L11 ANSWER 2 OF 26 WPIDS (C) 2003 THOMSON DERWENT
 AN 2002-674850 [72] WPIDS
 CR 1997-393613 [36]; 1998-322748 [28]; 1998-557036 [47]; 2002-083110 [11]
 DNC C2002-190055
 TI Composition useful for e.g. separation of nucleic acids
 comprises a positively or neutrally charged phosphoramidite.
 DC B04 B05 D16
 IN ALLAWI, H T; LYAMICHEV, V; NERI, B P; SKRZPCZYNSKI, Z; TAKOVA, T; WAYLAND,
 S R
 PA (THIR-N) THIRD WAVE TECHNOLOGIES INC
 CYC 100
 PI WO 2002063030 A2 20020815 (200272)* EN 197p
 RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ
 NL OA PT SD SE SL SZ TR TZ UG ZM ZW
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK
 DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR
 KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ OM PH PL PT
 RO RU SD SE SG SI SK SL TJ TM TN TR TT TZ UA UG US UZ VN YU ZA ZM
 ZW
 US 2002128465 A1 20020912 (200272)
 ADT WO 2002063030 A2 WO 2002-US3423 20020206; US 2002128465 A1 CIP of US
 1996-682853 19960712, CIP of US 1999-333145 19990614, US 2001-777430
 20010206

FDT US 2002128465 A1 CIP of US 6001567
PRAI US 2001-777430 20010206; US 1996-682853 19960712; US 1999-333145
19990614

AN 2002-674850 [72] WPIDS

CR 1997-393613 [36]; 1998-322748 [28]; 1998-557036 [47]; 2002-083110 [11]

AB WO 200263030 A UPAB: 20030619

NOVELTY - Composition comprises a positively or neutrally charged phosphoramidite.

DETAILED DESCRIPTION - Composition (c) or (c') comprises a positively charged phosphoramidite of formula (I) or a neutrally charged phosphoramidite of formula (II). (I) comprises nitrogen-containing chemical group selected from primary, secondary or tertiary amine or ammonium group. (II) comprises secondary or tertiary amine or ammonium group.

X, Z = a reactive phosphate group;

Y = a protected hydroxy group;

X' = a protected hydroxy group;

N, N' = an amine group.

INDEPENDENT CLAIMS are included for the following:

(1) a composition (c1) comprising a charge tag (x1) attached to a terminal end of a **nucleic acid** molecule, the charge tag comprises a phosphate group and a positively charged molecule;

(2) a composition (c2) comprising a **nucleic acid** molecule that comprises a positively charged phosphoramidite;

(3) a composition (c3) comprising a charge tag attached to the terminal end of a **nucleic acid** molecule, the charge tag comprises a positively charged phosphoramidite;

(4) a composition (c4) comprising a fluorescent dye directly bonded to a phosphate group, which is not directly bonded to an amine group;

(5) a mixture (m) comprising a number of **oligonucleotides**, each **oligonucleotide** is attached to a different charge tag with each charge tag comprising a phosphate group and a positively charged group;

(6) a composition (c5) comprising a solid support attached to a charged tag, the charge tag comprises a positively charged group and a reactive group configured to allow the charge tag to covalently attach to the **nucleic acid** molecule;

(7) separating **nucleic acid** molecules involving either:

(a) treating (m1) a charge-balanced **oligonucleotide** containing the charge tag to produce a charge-unbalanced **oligonucleotide** and separating the charge-unbalanced **oligonucleotide** from the reaction mixture; or

(b) treating (m2) a number of charge-balanced **oligonucleotides**, each containing different charge tags, to produce at least 2 charge-unbalanced **oligonucleotides**, and separating the charge-unbalanced **oligonucleotides** from the reaction mixture.

USE - The composition is useful for separation of **nucleic acid** molecules (claimed). The composition is further useful for fractionation of specific **nucleic acids** by selective charge reversal useful in e.g. INVADER assay cleavage reactions; and in the synthesis of charge-balanced molecules.

ADVANTAGE - In the fractionation of **nucleic acid** molecules, the method provides an absolute readout of the partition of products from substrates (i.e. provides a 100% separation). Through the use of multiple positively charged adducts, synthetic molecules can be constructed with sufficient modification due to the fact that the normally negatively charged strand is made nearly neutral. It is also possible to distinguish between enzymatically or thermally degraded DNA fragments due to the absence or presence of 3'phosphate.

09567863

L11 ANSWER 3 OF 26 USPATFULL
AN 2003:159317 USPATFULL
TI Method of evaluating drug efficacy and toxicity
IN Ishiguro, Takahiko, Yokohama-shi, JAPAN
Yasukawa, Kiyoshi, Kawasaki-shi, JAPAN
Tsuchiya, Shigeo, Tokyo, JAPAN
PA TOSOH CORPORATION, Shinnanyo-shi, JAPAN (non-U.S. corporation)
PI US 2003108930 A1 20030612
AI US 2002-266605 A1 20021009 (10)
PRAI JP 2001-312716 20011010
DT Utility
FS APPLICATION
LREP OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C., 1940 DUKE STREET,
ALEXANDRIA, VA, 22314
CLMN Number of Claims: 4
ECL Exemplary Claim: 1
DRWN 2 Drawing Page(s)
LN.CNT 558
AB A method of assaying the efficacy and/or toxicity of a test substance by expression of a specific gene in a cell or a microorganism, which comprises treating the cell or the microorganism with the test substance, a step of amplifying an RNA having a sequence homologous or complementary to a specific sequence in a target RNA obtained as the result of transcription of the specific gene, and a step of determining whether the target RNA is transcribed through the expression of the specific gene by detecting the RNA amplified in the previous amplification step.

L11 ANSWER 4 OF 26 USPATFULL
AN 2003:140412 USPATFULL
TI Single nucleotide amplification and detection by polymerase
IN Nelson, John, Neshanic Station, NJ, UNITED STATES
Fuller, Carl, Berkeley Heights, NJ, UNITED STATES
Sood, Anup, Flemington, NJ, UNITED STATES
Kumar, Shiv, Belle Mead, NJ, UNITED STATES
PI US 2003096253 A1 20030522
AI US 2002-113025 A1 20020401 (10)
PRAI US 2001-315798P 20010829 (60)
DT Utility
FS APPLICATION
LREP Amersham Biosciences Corp., 800 Centennial Avenue, Piscataway, NJ, 08855
CLMN Number of Claims: 78
ECL Exemplary Claim: 1
DRWN 3 Drawing Page(s)
LN.CNT 1354

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method of characterizing a nucleic acid sample is provided that includes the steps of: (a) conducting a DNA polymerase reaction that includes the reaction of a template, a non-hydrolyzable primer, at least one terminal phosphate-labeled nucleotide, DNA polymerase, and an enzyme having 3'-fwdarw.5' exonuclease activity which reaction results in the production of labeled polyphosphate; (b) permitting the labeled polyphosphate to react with a phosphatase to produce a detectable species characteristic of the sample; (c) detecting the detectable species; and (d) characterizing the nucleic acid sample based on the detection.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 5 OF 26 USPATFULL

09567863

AN 2003:109193 USPATFULL
TI Fluorescence dyes and their use as fluorescence markers
IN Daltrozzo, Ewald, Constance, GERMANY, FEDERAL REPUBLIC OF
Reiss, Alexander, Frickingen, GERMANY, FEDERAL REPUBLIC OF
PA Roche Diagnostics GmbH, GERMANY, FEDERAL REPUBLIC OF (non-U.S.
corporation)
PI US 6552199 B1 20030422
AI US 2000-568679 20000511 (9)
PRAI DE 1999-19923168 19990520
DT Utility
FS GRANTED
EXNAM Primary Examiner: Huang, Evelyn Mei
LREP Amick, Marilyn L., Roche Diagnostics Corporation
CLMN Number of Claims: 19
ECL Exemplary Claim: 1
DRWN 0 Drawing Figure(s); 0 Drawing Page(s)
LN.CNT 814
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The subject matter of the invention are new xanthene derivatives of the
formula I, ##STR1##

wherein R1, R2, R3, R4, R5, R6, R7, R8, R9, R10, R11, and X, Y, are as
defined herein. The compounds according to the invention provide
molecules that are--due to their spectral properties (absorption maxima
in the range of approx. 650 nm and above as well as emission maxima
above 670 nm)--very suitable for the use as dyes and in particular as
fluorescence dyes. The compounds of the formula I according to the
invention are used for the production of fluorescence conjugates, for
their application in immunoassays, for DNA analytics, for in-vivo
diagnostics or as a laser dye.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 6 OF 26 USPATFULL
AN 2003:37497 USPATFULL
TI Novel genome analyzing method
IN Ishiguro, Takahiko, Kanagawa, JAPAN
Yasukawa, Kiyoshi, Kanagawa, JAPAN
PA TOSOH CORPORATION (non-U.S. corporation)
PI US 2003027142 A1 20030206
AI US 2001-904557 A1 20010716 (9)
PRAI JP 2000-218737 20000714
JP 2000-263248 20000828
JP 2000-334935 20001030
DT Utility
FS APPLICATION
LREP SUGHRUE MION ZINN MACPEAK & SEAS, PLLC, 2100 Pennsylvania Avenue, NW,
Washington, DC, 20037-3213
CLMN Number of Claims: 9
ECL Exemplary Claim: 1
DRWN 8 Drawing Page(s)
LN.CNT 800
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A novel transcriptome analyzing method and to provide a gene found by
this method and a protein encoded by the gene. A method for determining
whether or not a continued arbitrary DNA sequence existing in the genome
of an arbitrary biological species, in which the nucleotide sequence is
already known but its possibility of being a gene expression region is
unclear (specific region), is the specific region, which comprises
detecting whether or not a nucleotide sequence that corresponds to the
nucleotide sequence of the region is present in the RNA of the
biological species, and a method for determining the gene expression

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region in an arbitrary region on a genome or the entire genome, which comprises repeatedly carrying out the above method.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 7 OF 26 USPATFULL
AN 2002:265860 USPATFULL
TI Cyanine dyes as labeling reagents for detection of biological and other materials by luminescence methods
IN Waggoner, Alan S., Pittsburgh, PA, UNITED STATES
PA Carnegie Mellon University (U.S. corporation)
PI US 2002146736 A1 20021010
AI US 2002-103116 A1 20020322 (10)
RLI Division of Ser. No. US 2000-740486, filed on 19 Dec 2000, PENDING
Continuation of Ser. No. US 1996-745712, filed on 12 Nov 1996, GRANTED,
Pat. No. US 6225050 Continuation-in-part of Ser. No. US 1992-831759,
filed on 22 Sep 1992, GRANTED, Pat. No. US 5627027 Continuation of Ser.
No. US 1986-854347, filed on 18 Apr 1986, ABANDONED
DT Utility
FS APPLICATION
LREP NIXON & VANDERHYE P.C., 8th Floor, 1100 North Glebe Road, Arlington, VA,
22201-4714
CLMN Number of Claims: 8
ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)
LN.CNT 1222

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to luminescent dyes and methods for covalently attaching the dyes to a component or mixture of components so that the components may be detected and/or quantified by luminescence detection methods. The dyes are cyanine and cyanine-type dyes that contain or are derivatized to contain a reactive group. The reactive group is covalently reactive with amine, hydroxy and/or sulphydryl groups on the component so that the dye can be covalently bound to the component. In addition, the dyes are preferably soluble in aqueous or other medium in which the component is contained. The components to be labeled can be either biological materials, such as antibodies, antigens, peptides, nucleotides, hormones, drugs, or non-biological materials, such as polymers, glass, or other surfaces. Any luminescent or light absorbing detecting step can be employed in the method of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 8 OF 26 USPATFULL
AN 2002:258770 USPATFULL
TI Cyanine dyes as labeling reagents for detection of biological and other materials by luminescence methods
IN Waggoner, Alan S., Pittsburgh, PA, UNITED STATES
PA Carnegie Mellon University (U.S. corporation)
PI US 2002142340 A1 20021003
AI US 2002-103119 A1 20020322 (10)
RLI Division of Ser. No. US 2000-740486, filed on 19 Dec 2000, PENDING
Continuation of Ser. No. US 1996-745712, filed on 12 Nov 1996, GRANTED,
Pat. No. US 6225050 Continuation-in-part of Ser. No. US 1992-831759,
filed on 22 Sep 1992, GRANTED, Pat. No. US 5627027 Continuation of Ser.
No. US 1986-854347, filed on 18 Apr 1986, ABANDONED
DT Utility
FS APPLICATION
LREP NIXON & VANDERHYE P.C., 8th Floor, 1100 North Glebe Road, Arlington, VA,
22201-4714
CLMN Number of Claims: 8

09567863

ECL Exemplary Claim: 1
DRWN 5 Drawing Page(s)

LN.CNT 1222

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention pertains to luminescent dyes and methods for covalently attaching the dyes to a component or mixture of components so that the components may be detected and/or quantified by luminescence detection methods. The dyes are cyanine and cyanine-type dyes that contain or are derivatized to contain a reactive group. The reactive group is covalently reactive with amine, hydroxy and/or sulfhydryl groups on the component so that the dye can be covalently bound to the component. In addition, the dyes are preferably soluble in aqueous or other medium in which the component is contained. The components to be labeled can be either biological materials, such as antibodies, antigens, peptides, nucleotides, hormones, drugs, or non-biological materials, such as polymers, glass, or other surfaces. Any luminescent or light absorbing detecting step can be employed in the method of the invention.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 9 OF 26 USPATFULL

AN 2002:236261 USPATFULL

TI Charge tags and the separation of nucleic acid molecules

IN Lyamichev, Victor, Madison, WI, UNITED STATES
Skrzpczynski, Zbigniew, Verona, WI, UNITED STATES
Allawi, Hatim T., Madison, WI, UNITED STATES
Wayland, Sarah R., Madison, WI, UNITED STATES
Takova, Tsetska, Madison, WI, UNITED STATES
Neri, Bruce P., Madison, WI, UNITED STATES

PA Third Wave Technologies, Inc. (U.S. corporation)

PI US 2002128465 A1 20020912

AI US 2001-777430 A1 20010206 (9)

RLI Continuation-in-part of Ser. No. US 1999-333145, filed on 14 Jun 1999, PENDING Continuation-in-part of Ser. No. US 1996-682853, filed on 12 Jul 1996, GRANTED, Pat. No. US 6001567

DT Utility

FS APPLICATION

LREP MEDLEN & CARROLL, LLP, 101 HOWARD STREET, SUITE 350, SAN FRANCISCO, CA, 94105

CLMN Number of Claims: 86

ECL Exemplary Claim: 1

DRWN 46 Drawing Page(s)

LN.CNT 5163

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention relates to novel phosphoramidites, including positive and neutrally charged compounds. The present invention also provides charge tags for attachment to materials including solid supports and nucleic acids, wherein the charge tags increase or decrease the net charge of the material. The present invention further provides methods for separating and characterizing molecules based on the charge differentials between modified and unmodified materials.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 10 OF 26 USPATFULL

AN 2002:213691 USPATFULL

TI Asymmetric benzoxanthene dye labelling reagents

IN Benson, Scott C., Oakland, CA, UNITED STATES
Menchen, Steven M., Fremont, CA, UNITED STATES

09567863

Theisen, Peter D., South San Francisco, CA, UNITED STATES
Hennessey, Kevin M., San Mateo, CA, UNITED STATES
Furniss, Vergine C., San Mateo, CA, UNITED STATES
Hauser, Joan D., Oakland, CA, UNITED STATES

PA The Perkin-Elmer Corporation, Foster City, CA (U.S. corporation)
PI US 2002115067 A1 20020822
AI US 2001-976842 A1 20011011 (9)
RLI Continuation of Ser. No. US 2000-495111, filed on 1 Feb 2000, PATENTED
Continuation of Ser. No. US 1996-626085, filed on 1 Apr 1996, PATENTED
DT Utility
FS APPLICATION
LREP PATTI SELAN, PATENT ADMINISTRATOR, APPLIED BIOSYSTEMS, 850 LINCOLN
CENTRE DRIVE, FOSTER CITY, CA, 94404
CLMN Number of Claims: 41
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 1708
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A class of asymmetric monobenzoxanthene compounds useful as fluorescent dyes are disclosed having the structure ##STR1##

wherein Y.sub.1 and Y.sub.2 are individually hydroxyl amino, imminium, or oxygen, R.sub.1-r.sub.8 are hydrogen, fluorine, chlorine, alkyl, alkene, alkyne, sulfonate, amino, amido, nitrile, alkoxy, linking group, and combinations thereof and R.sub.9 is acetylene, alkane, alkene, cyano, substituted phenyl, and combinations thereof. The invention further includes novel intermediate compounds useful for the synthesis of asymmetric benzoxanthene compounds having the general structure ##STR2##

where substituents R.sub.3-R.sub.7 correspond to like-referenced substituents in the structure of described above, and Y.sub.2 is hydroxyl or amine. In another aspect the invention includes methods for synthesizing the above dye compounds and intermediates. In yet another aspect the present invention includes reagents labeled with the asymmetric benzoxanthene dye compounds, including deoxynucleotides, dideoxynucleotides, phosphoramidites, and polynucleotides. In an additional aspect, the invention includes methods utilizing such dye compounds and reagents including dideoxy polynucleotide sequencing and fragment analysis methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 11 OF 26 USPATFULL
AN 2002:198553 USPATFULL
TI Novel nucleic acid probes, method for determining concentrations of nucleic acid by using the probes, and method for analyzing data obtained by the method
IN Kurane, Ryuichiro, Tsukuba-shi, JAPAN
Kanagawa, Takahiro, Tsukuba-shi, JAPAN
Kamagata, Yoichi, Tsukuba-shi, JAPAN
Torimura, Masaki, Tsukuba-shi, JAPAN
Kurata, Shinya, Tokyo, JAPAN
Yamada, Kazutaka, Tokyo, JAPAN
Yokomaku, Toyokazu, Tokyo, JAPAN
PA Nat'l Inst. of advan. Industrial Science and Tech, Tokyo, JAPAN (non-U.S. corporation)
PI US 2002106653 A1 20020808
AI US 2001-891517 A1 20010627 (9)
PRAI JP 2000-193133 20000627
JP 2000-236115 20000803
JP 2000-292483 20000926

09567863

DT Utility
FS APPLICATION
LREP OBLON SPIVAK MCCLELLAND MAIER & NEUSTADT PC, FOURTH FLOOR, 1755
JEFFERSON DAVIS HIGHWAY, ARLINGTON, VA, 22202
CLMN Number of Claims: 54
ECL Exemplary Claim: 1
DRWN 39 Drawing Page(s)
LN.CNT 5605

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB **Nucleic acid** probes are provided, each of which is formed of a single-stranded **oligonucleotide** which can hybridize to a target **nucleic acid** and is labeled with a fluorescent dye or with a fluorescent dye and a quencher substance. The **nucleic acid** probes can be easily designed, permit determination, polymorphous analysis or real-time quantitative PCR of **nucleic acids** in short time, and are not dissociated during reactions. **Nucleic acid** determination methods, polymorphous analysis methods and real-time quantitative PCR methods, which make use of the **nucleic acid** probes, are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 12 OF 26 USPATFULL
AN 2002:165352 USPATFULL
TI Energy transfer dyes with enhanced fluorescence
IN Lee, Linda G., Palo Alto, CA, UNITED STATES
Spurgeon, Sandra L., San Mateo, CA, UNITED STATES
Rosenblum, Barnett, San Jose, CA, UNITED STATES
PI US 2002086985 A1 20020704
AI US 2001-14743 A1 20011029 (10)
RLI Continuation of Ser. No. US 1999-272097, filed on 18 Mar 1999, PATENTED
Continuation of Ser. No. US 1998-46203, filed on 23 Mar 1998, PATENTED
Continuation of Ser. No. US 1996-726462, filed on 4 Oct 1996, PATENTED
Continuation-in-part of Ser. No. US 1996-672196, filed on 27 Jun 1996,
PATENTED Continuation-in-part of Ser. No. US 1996-642330, filed on 3 May
1996, PATENTED

DT Utility
FS APPLICATION
LREP WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA,
943041050
CLMN Number of Claims: 79
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 2533

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye has the general structure R.₂₁Z.₁C(O)R.₂₂R.₂₈ where R.₂₁ is a C.₁₋₅ alkyl attached to the donor dye, C(O) is a carbonyl group, Z.₁ is either NH, sulfur or oxygen, R.₂₂ is a substituent which includes an alkene, diene, alkyne, a five and six membered ring having at least one unsaturated bond or a fused ring structure which is attached to the carbonyl carbon, and R.₂₈ includes a functional group which attaches the linker to the acceptor dye.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 13 OF 26 USPATFULL

09567863

AN 2002:112537 USPATFULL
TI UV excitable fluorescent energy transfer dyes
IN Lee, Linda G., Palo Alto, CA, UNITED STATES
PI US 2002058272 A1 20020516
AI US 2001-902561 A1 20010710 (9)
RLI Division of Ser. No. US 1999-385352, filed on 27 Aug 1999, PENDING
DT Utility
FS APPLICATION
LREP WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA,
943041050
CLMN Number of Claims: 70
ECL Exemplary Claim: 1
DRWN 15 Drawing Page(s)
LN.CNT 1643

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel energy transfer dyes which can be used with shorter wavelength light sources are provided. These dyes include a donor dye with an absorption maxima at a wavelength between about 250 to 450 nm and an acceptor dye which is capable of absorbing energy emitted from the donor dye. One of the energy transfer dyes has a donor dye which is a member of a class of dyes having a coumarin or pyrene ring structure and an acceptor dye which is capable of absorbing energy emitted from the donor dye, wherein the donor dye has an absorption maxima between about 250 and 450 nm and the acceptor dye has an emission maxima at a wavelength greater than about 500 nm.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 14 OF 26 USPATFULL
AN 2002:57547 USPATFULL
TI UV excitable fluorescent energy transfer dyes
IN Lee, Linda G., Palo Alto, CA, United States
PA PE Corporation, Foster City, CA, United States (U.S. corporation)
PI US 6358684 B1 20020319
AI US 1999-385352 19990827 (9)
DT Utility
FS GRANTED
EXNAM Primary Examiner: Riley, Jezia
LREP Weitz, David J., Wilson Sonsini Goodrich & Rosati
CLMN Number of Claims: 26
ECL Exemplary Claim: 1
DRWN 14 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 1482

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel energy transfer dyes which can be used with shorter wavelength light sources are provided. These dyes include a donor dye with an absorption maxima at a wavelength between about 250 to 450 nm and an acceptor dye which is capable of absorbing energy emitted from the donor dye. One of the energy transfer dyes has a donor dye which is a member of a class of dyes having a coumarin or pyrene ring structure and an acceptor dye which is capable of absorbing energy emitted from the donor dye, wherein the donor dye has an absorption maxima between about 250 and 450 nm and the acceptor dye has an emission maxima at a wavelength greater than about 500 nm.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 15 OF 26 USPATFULL
AN 2002:1327 USPATFULL
TI Method for detecting oligonucleotides using energy transfer dyes with long stoke shift
IN Lee, Linda G., Palo Alto, CA, United States

09567863

Spurgeon, Sandra L., San Mateo, CA, United States
Rosenblum, Barnett, San Jose, CA, United States

PA PE Corporation (NY), Foster City, CA, United States (U.S. corporation)

PI US 6335440 B1 20020101

AI US 1999-272097 19990318 (9)

RLI Continuation of Ser. No. US 1998-46203, filed on 23 Mar 1998, now patented, Pat. No. US 5945526 Continuation of Ser. No. US 1996-726462, filed on 4 Oct 1996, now patented, Pat. No. US 5800996 Continuation-in-part of Ser. No. US 1996-672196, filed on 27 Jun 1996 Continuation-in-part of Ser. No. US 1996-642330, filed on 3 May 1996, now patented, Pat. No. US 5863727

DT Utility

FS GRANTED

EXNAM Primary Examiner: Houtteman, Scott W.

LREP Weitz, David J., Wilson Sonsini Goodrich & Rosati

CLMN Number of Claims: 59

ECL Exemplary Claim: 1

DRWN 8 Drawing Figure(s); 16 Drawing Page(s)

LN.CNT 2823

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye has the general structure R.₂₁Z.₂₂C(O)R.₂₂ where R.₂₁ is a C.₁₋₅ alkyl attached to the donor dye, C(O) is a carbonyl group, Z.₂₂ is either NH, sulfur or oxygen, R.₂₂ is a substituent which includes an alkene, diene, alkyne, a five and six membered ring having at least one unsaturated bond or a fused ring structure which is attached to the carbonyl carbon, and R.₂₂ includes a functional group which attaches the linker to the acceptor dye.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 16 OF 26 USPATFULL

AN 2001:223892 USPATFULL

TI UV excitable fluorescent energy transfer dyes

IN Lee, Linda G., Palo Alto, CA, United States

PI US 2001049109 A1 20011206

AI US 2001-902562 A1 20010710 (9)

RLI Division of Ser. No. US 1999-385352, filed on 27 Aug 1999, PENDING

DT Utility

FS APPLICATION

LREP WILSON SONSINI GOODRICH & ROSATI, 650 PAGE MILL ROAD, PALO ALTO, CA, 943041050

CLMN Number of Claims: 70

ECL Exemplary Claim: 1

DRWN 15 Drawing Page(s)

LN.CNT 1643

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel energy transfer dyes which can be used with shorter wavelength light sources are provided. These dyes include a donor dye with an absorption maxima at a wavelength between about 250 to 450 nm and an acceptor dye which is capable of absorbing energy emitted from the donor dye. One of the energy transfer dyes has a donor dye which is a member of a class of dyes having a coumarin or pyrene ring structure and an acceptor dye which is capable of absorbing energy emitted from the donor dye, wherein the donor dye has an absorption maxima between about 250 and 450 nm and the acceptor dye has an emission maxima at a wavelength greater than about 500 nm.

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 17 OF 26 USPATFULL
AN 2001:179262 USPATFULL
TI Polynucleotides labelled with asymmetric benzoxanthene dyes
IN Benson, Scott C., Oakland, CA, United States
Menchen, Steven M., Fremont, CA, United States
Theisen, Peter D., South San Francisco, CA, United States
Hennessey, Kevin M., San Mateo, CA, United States
Furniss, Vergine C., San Mateo, CA, United States
Hauser, Joan, Oakland, CA, United States
PA The Perkin-Elmer Corporation, Foster City, CA, United States (U.S.
corporation)
PI US 6303775 B1 20011016
AI US 2000-495111 20000201 (9)
RLI Continuation of Ser. No. US 1996-626085, filed on 1 Apr 1996, now
patented, Pat. No. US 6020481
DT Utility
FS GRANTED
EXNAM Primary Examiner: Houtteman, Scott W.
LREP Andrus, Alex, Grossman, Paul D.
CLMN Number of Claims: 35
ECL Exemplary Claim: 1
DRWN 16 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 1654
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB A class of asymmetric monobenzoxanthene compounds useful as fluorescent
dyes are disclosed having the structure ##STR1##

wherein Y.sub.1 and Y.sub.2 are individually hydroxyl, amino, imminium,
or oxygen, R.sub.1 -R.sub.8 are hydrogen, fluorine, chlorine, alkyl,
alkene, alkyne, sulfonate, amino, amido, nitrile, alkoxy, linking group,
and combinations thereof, and R.sub.9 is acetylene, alkane, alkene,
cyano, substituted phenyl, and combinations thereof. The invention
further includes novel intermediate compounds useful for the synthesis
of asymmetric benzoxanthene compounds having the general structure
##STR2##

where substituents R.sub.3 -R.sub.7 correspond to like-referenced
substituents in the structure of described above, and Y.sub.2 is
hydroxyl or amine. In another aspect, the invention includes methods for
synthesizing the above dye compounds and intermediates. In yet another
aspect, the present invention includes reagents labeled with the
asymmetric benzoxanthene dye compounds, including deoxynucleotides,
dideoxynucleotides, phosphoramidites, and polynucleotides. In an
additional aspect, the invention includes methods utilizing such dye
compounds and reagents including dideoxy polynucleotide sequencing and
fragment analysis methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 18 OF 26 USPATFULL
AN 2001:63428 USPATFULL
TI Cyanine dyes as labeling reagents for detection of biological and other
materials by luminescence methods
IN Waggoner, Alan S., Pittsburgh, PA, United States
PA Carnegie Mellon University, Pittsburgh, PA, United States (U.S.
corporation)
PI US 6225050 B1 20010501
AI US 1996-745712 19961112 (8)
RLI Continuation-in-part of Ser. No. US 1992-831759, filed on 22 Sep 1992,
now patented, Pat. No. US 5627027 Continuation of Ser. No. US

09567863

1986-854347, filed on 18 Apr 1986, now abandoned

DT Utility
FS Granted
EXNAM Primary Examiner: Venkat, Jyothsna; Assistant Examiner: Ponnaluri, P.
LREP Kirkpatrick & Lockhart LLP
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN 7 Drawing Figure(s); 5 Drawing Page(s)
LN.CNT 1289

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cyanine and related dyes, such as merocyanine, styryl and oxonol dyes, are strongly light-absorbing and highly luminescent. Cyanine and related dyes having functional groups make them reactive with amine, hydroxy and sulfhydryl groups are covalently attached to proteins, nucleic acids, carbohydrates, sugars, cells and combinations thereof, and other biological and nonbiological materials, to make these materials fluorescent so that they can be detected. The labeled materials can then be used in assays employing excitation light sources and luminescence detectors. For example, fluorescent cyanine and related dyes can be attached to amine, hydroxy or sulfhydryl groups of avidin and to antibodies and to lectins. Thereupon, avidin labeled with cyanine type dyes can be used to quantify biotinylated materials and antibodies conjugated with cyanine-type dyes can be used to detect and measure antigens and haptens. In addition, cyanine-conjugated lectins can be used to detect specific carbohydrate groups. Also, cyanine-conjugated fragments of DNA or RNA can be used to identify the presence of complementary nucleotide sequences in DNA or RNA.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 19 OF 26 USPATFULL
AN 2001:59627 USPATFULL
TI Electron-deficient nitrogen heterocycle-substituted fluorescein dyes
IN Upadhyay, Krishna G., Union City, CA, United States
Menchen, Steven M., Fremont, CA, United States
Zhen, Weiguo, Foster City, CA, United States
PA PE Corporation, Foster City, CA, United States (U.S. corporation)
PI US 6221604 B1 20010424
AI US 2000-498702 20000207 (9)
DT Utility
FS Granted
EXNAM Primary Examiner: Ceperley, Mary E.
LREP Andrus, Alex
CLMN Number of Claims: 67
ECL Exemplary Claim: 1,25
DRWN 16 Drawing Figure(s); 14 Drawing Page(s)
LN.CNT 1874

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The invention provides compositions electron-deficient nitrogen heterocycle-substituted fluorescein dyes and methods in which the dyes are conjugated to substrates and used as detection labels in molecular biology experiments. The electron-deficient nitrogen heterocycles include pyridine, quinoline, pyrazine, and the like. Substrates include polynucleotides, nucleosides, nucleotides, peptides, proteins, carbohydrates, and ligands.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 20 OF 26 USPATFULL
AN 2001:55701 USPATFULL
TI Method for detecting oligonucleotides using UV light source
IN Lee, Linda G., Palo Alto, CA, United States

09567863

PA PE Corporation, Foster City, CA, United States (U.S. corporation)
PI US 6218124 B1 20010417
AI US 1999-385230 19990827 (9)

DT Utility
FS Granted

EXNAM Primary Examiner: Riley, Jezia
LREP Weitz, David J. Wilson Sonsini Goodrich & Rosati
CLMN Number of Claims: 27
ECL Exemplary Claim: 1
DRWN 14 Drawing Figure(s); 15 Drawing Page(s)

LN.CNT 1417

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A method for detecting **oligonucleotides** is provided and comprises forming a series of different sized **oligonucleotides** labeled with an energy transfer dye; separating the series of labeled **oligonucleotides** based on size; and detecting the separated labeled **oligonucleotide** by exposing the **oligonucleotides** to light having a wavelength between about 250 and 450 nm and measuring light emitted by the energy transfer dye at a wavelength greater than about 500 nm.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 21 OF 26 USPATFULL
AN 2000:44221 USPATFULL
TI Cyanine dyes as labeling reagents for detection of biological and other materials by luminescence methods
IN Waggoner, Alan S., Pittsburgh, PA, United States
PA Carnegie Mellon University, Pittsburgh, PA, United States (U.S. corporation)

PI US 6048982 20000411
AI US 1997-873470 19970612 (8)
RLI Division of Ser. No. US 1996-745712, filed on 12 Nov 1996 which is a continuation-in-part of Ser. No. US 1992-831759, filed on 22 Sep 1992, now patented, Pat. No. US 5627027 which is a continuation of Ser. No. US 1986-854347, filed on 18 Apr 1986, now abandoned

DT Utility
FS Granted

EXNAM Primary Examiner: MacMillan, Keith D.; Assistant Examiner: Ponnaluri, P.
LREP Kirkpatrick & Lockhart LLP
CLMN Number of Claims: 2
ECL Exemplary Claim: 1
DRWN 4 Drawing Figure(s); 5 Drawing Page(s)

LN.CNT 1172

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Cyanine and related dyes, such as merocyanine, styryl and oxonol dyes, are strongly light-absorbing and highly luminescent. Cyanine and related dyes having functional groups make them reactive with amine, hydroxy and sulfhydryl groups are covalently attached to proteins, **nucleic acids**, carbohydrates, sugars, cells and combinations thereof, and other biological and nonbiological materials, to make these materials fluorescent so that they can be detected. The labeled materials can then be used in assays employing excitation light sources and luminescence detectors. For example, fluorescent cyanine and related dyes can be attached to amine, hydroxy or sulfhydryl groups of avidin and to antibodies and to lectins. Thereupon, avidin labeled with cyanine type dyes can be used to quantify biotinylated materials and antibodies conjugated with cyanine-type dyes can be used to detect and measure antigens and haptens. In addition, cyanine-conjugated lectins can be used to detect specific carbohydrate groups. Also, cyanine-conjugated fragments of DNA or RNA can be used to identify the presence of complementary nucleotide sequences in DNA or RNA.

09567863

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 22 OF 26 USPATFULL
AN 2000:12944 USPATFULL
TI Asymmetric benzoxanthene dyes
IN Benson, Scott C., Oakland, CA, United States
Menchen, Steven M., Fremont, CA, United States
Theisen, Peter D., South San Francisco, CA, United States
Hennessey, Kevin M., San Mateo, CA, United States
Furniss, Vergine C., San Mateo, CA, United States
Hauser, Joan, Oakland, CA, United States
PA The Perkin-Elmer Corporation, Foster City, CA, United States (U.S.
corporation)
PI US 6020481 20000201
AI US 1996-626085 19960401 (8)
DT Utility
FS Granted
EXNAM Primary Examiner: Houtteman, Scott W.
LREP Grossman, Paul D.
CLMN Number of Claims: 38
ECL Exemplary Claim: 1
DRWN 17 Drawing Figure(s); 15 Drawing Page(s)
LN.CNT 1682

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A class of asymmetric monobenzoxanthene compounds useful as fluorescent dyes are disclosed having the structure ##STR1## wherein Y_{sub.1} and Y_{sub.2} are individually hydroxyl amino, imminium, or oxygen, R_{sub.1} -R_{sub.8} are hydrogen, fluorine, chlorine, alkyl, alkene, alkyne, sulfonate, amino, amido, nitrile, alkoxy, linking group, and combinations thereof, and R_{sub.9} is acetylene, alkane, alkene, cyano, substituted phenyl, and combinations thereof. The invention further includes novel intermediate compounds useful for the synthesis of asymmetric benzoxanthene compounds having the general structure ##STR2## where substituents R_{sub.3} -R_{sub.7} correspond to like-referenced substituents in the structure of described above, and Y_{sub.2} is hydroxyl or amine. In another aspect, the invention includes methods for synthesizing the above dye compounds and intermediates. In yet another aspect, the present invention includes reagents labeled with the asymmetric benzoxanthene dye compounds, including deoxynucleotides, dideoxynucleotides, phosphoramidites, and polynucleotides. In an additional aspect, the invention includes methods utilizing such dye compounds and reagents including dideoxy polynucleotide sequencing and fragment analysis methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 23 OF 26 USPATFULL
AN 1999:102915 USPATFULL
TI Energy transfer dyes with enhanced fluorescence
IN Lee, Linda G., Palo Alto, CA, United States
Spurgeon, Sandra L., San Mateo, CA, United States
Rosenblum, Barnett, San Jose, CA, United States
PA Perkin-Elmer Corporation, Foster City, CA, United States (U.S.
corporation)
PI US 5945526 19990831
AI US 1998-46203 19980323 (9)
RLI Continuation-in-part of Ser. No. US 1996-642330, filed on 3 May 1996,
now patented, Pat. No. US 5863727 And Ser. No. US 1996-672196, filed on
27 Jun 1996, now patented, Pat. No. US 5847162
DT Utility
FS Granted

09567863

EXNAM Primary Examiner: Houtteman, Scott W.
LREP Wilson, Sonsini, Goodrich & Rosati
CLMN Number of Claims: 109
ECL Exemplary Claim: 1
DRWN 28 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 2985

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye has the general structure R._{sub.21} Z._{sub.1} C(O)R._{sub.22} R._{sub.28} where R._{sub.21} is a C._{sub.1-5} alkyl attached to the donor dye, C(O) is a carbonyl group, Z._{sub.1} is either NH, sulfur or oxygen, R._{sub.22} is a substituent which includes an alkene, diene, alkyne, a five and six membered ring having at least one unsaturated bond or a fused ring structure which is attached to the carbonyl carbon, and R._{sub.28} includes a functional group which attaches the linker to the acceptor dye.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 24 OF 26 USPATFULL
AN 1999:12742 USPATFULL
TI Energy transfer dyes with enhanced fluorescence
IN Lee, Linda G., Palo Alto, CA, United States
Spurgeon, Sandra L., San Mateo, CA, United States
Rosenblum, Barnett, San Jose, CA, United States
PA The Perkin-Elmer Corporation, Foster City, United States (U.S.
corporation)

PI US 5863727 19990126
AI US 1996-642330 19960503 (8)

DT Utility
FS Granted

EXNAM Primary Examiner: Houtteman, Scott W.
LREP Wilson Sonsini Goodrich & Rosati
CLMN Number of Claims: 59
ECL Exemplary Claim: 1
DRWN 6 Drawing Figure(s); 6 Drawing Page(s)
LN.CNT 1909

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Energy transfer fluorescent dyes, reagents incorporating the dyes, kits and methods for using the dyes and reagents are provided. The energy transfer fluorescent dyes include a donor dye which absorbs light at a first wavelength and emits excitation energy in response, the donor dye including a xanthene ring structure having a 4' ring position, an acceptor dye capable of absorbing the excitation energy emitted by the donor dye and fluorescing at a second wavelength in response, and a linker attaching the donor dye to the acceptor dye, the linker having a 4' end which includes a R._{sub.1} XC(O)R._{sub.2} group where R._{sub.1} is a C._{sub.1-5} alkyl attached to the 4' ring position of the donor dye, X selected from the group consisting of NH, sulfur and oxygen, C(O) is a carbonyl group, and R._{sub.2} includes an alkene, diene, alkyne, a five and six membered ring having at least one unsaturated bond or a fused ring structure which is attached to the carbonyl carbon. Alternatively, the energy transfer fluorescent dyes include a donor dye which absorbs light at a first wavelength and emits excitation energy in response, the donor dye including a xanthene ring structure, an acceptor dye which is either a xanthene, cyanine, phthalocyanine or squaraine dye which is capable of absorbing the excitation energy emitted by the donor dye and fluorescing at a second wavelength in response, the acceptor having an emission maximum that is greater than about 600 nm or at least about 100

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nm greater than the absorbance maximum of the donor dye, and a linker attaching the donor dye to the acceptor dye.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 25 OF 26 USPATFULL
AN 1998:147707 USPATFULL
TI Asymmetric benzoxanthene dyes
IN Benson, Scott C., Oakland, CA, United States
Menchen, Steven M., Fremont, CA, United States
Theisen, Peter D., South San Francisco, CA, United States
Hennessey, Kevin M., San Mateo, CA, United States
Furniss, Vergine C., San Mateo, CA, United States
Hauser, Joan, Oakland, CA, United States
PA The Perkin-Elmer Corporation, Foster City, CA, United States (U.S. corporation)
PI US 5840999 19981124
AI US 1997-824102 19970326 (8)
RLI Division of Ser. No. US 1996-626085, filed on 1 Apr 1996
DT Utility
FS Granted
EXNAM Primary Examiner: Marschel, Ardin H.; Assistant Examiner: Riley, Jezia
LREP Grossman, Paul D.
CLMN Number of Claims: 5
ECL Exemplary Claim: 1
DRWN 13 Drawing Figure(s); 13 Drawing Page(s)
LN.CNT 1503

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB A class of asymmetric monobenzoxanthene compounds useful as fluorescent dyes are disclosed having the structure ##STR1## wherein Y_{sub.1}, and Y_{sub.2} are individually hydroxyl, amino, imminium, or oxygen, R_{sub.1} -R_{sub.8} are hydrogen, fluorine, chlorine, alkyl alkene, alkyne, sulfonate, amino, amido, nitrile, alkoxy, linking group, and combinations thereof, and R_{sub.9} is acetylene, alkane, alkene, cyano, substituted phenyl and combinations thereof. The invention further includes novel intermediate compounds useful for the synthesis of asymmetric benzoxanthene compounds having the general structure ##STR2## where substituents R_{sub.3} -R_{sub.7} correspond to like-referenced substituents in the structure of described above, and Y_{sub.2} is hydroxyl or amine. In another aspect, the invention includes methods for synthesizing the above dye compounds and intermediates. In yet another aspect, the present invention includes reagents labeled with the asymmetric benzoxanthene dye compounds, including deoxynucleotides, dideoxynucleotides, phosphoramidites, and polynucleotides. In an additional aspect, the invention includes methods utilizing such dye compounds and reagents including dideoxy polynucleotide sequencing and fragment analysis methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 26 OF 26 USPATFULL
AN 1998:104569 USPATFULL
TI Energy transfer dyes with enhanced fluorescence
IN Lee, Linda G., Palo Alto, CA, United States
Spurgeon, Sandra L., San Mateo, CA, United States
Rosenblum, Barnett, San Jose, CA, United States
PA The Perkin Elmer Corporation, Foster City, CA, United States (U.S. corporation)
PI US 5800996 19980901
AI US 1996-726462 19961004 (8)
RLI Continuation-in-part of Ser. No. US 1996-642330, filed on 3 May 1996 And Ser. No. US 1996-672196, filed on 27 Jun 1996

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DT Utility
FS Granted
EXNAM Primary Examiner: Houtteman, Scott W.
LREP Wilson Sonsini Goodrich & Rosati
CLMN Number of Claims: 79
ECL Exemplary Claim: 1,76
DRWN 28 Drawing Figure(s); 16 Drawing Page(s)
LN.CNT 2556

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Novel linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye are provided. These linkers facilitate the efficient transfer of energy between a donor and acceptor dye in an energy transfer dye. One of these linkers for linking a donor dye to an acceptor dye in an energy transfer fluorescent dye has the general structure R._{sub.21} Z._{sub.1} C(O)R._{sub.22} R._{sub.28} where R._{sub.21} is a C._{sub.1-5} alkyl attached to the donor dye, C(O) is a carbonyl group, Z._{sub.1} is either NH, sulfur or oxygen, R._{sub.22} is a substituent which includes an alkene, diene, alkyne, a five and six membered ring having at least one unsaturated bond or a fused ring structure which is attached to the carbonyl carbon, and R._{sub.28} includes a functional group which attaches the linker to the acceptor dye.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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=> file biosis medline caplus wpids uspatfull	SINCE FILE	TOTAL
COST IN U.S. DOLLARS	ENTRY	SESSION
FULL ESTIMATED COST	0.21	0.21

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*** YOU HAVE NEW MAIL ***

=> s positiv? (6a)link? (6a) phosph? (6a) (dye or label?)
4 FILES SEARCHED...

L1 7 POSITIV? (6A) LINK? (6A) PHOSPH? (6A) (DYE OR LABEL?)

=> dup rem l1
PROCESSING COMPLETED FOR L1
L2 7 DUP REM L1 (0 DUPLICATES REMOVED)

=> s 12 and oligonucleotide?
L3 7 L2 AND OLIGONUCLEOTIDE?

=> d 12 bib abs 1-7

L2 ANSWER 1 OF 7 USPATFULL
AN 2003:106233 USPATFULL
TI Compositions and methods for the therapy and diagnosis of pancreatic cancer
IN Benson, Darin R., Seattle, WA, UNITED STATES
Kilos, Michael D., Seattle, WA, UNITED STATES
Lodes, Michael J., Seattle, WA, UNITED STATES
Persing, David H., Redmond, WA, UNITED STATES
Hepler, William T., Seattle, WA, UNITED STATES
Jiang, Yuqiu, Kent, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)
PI US 2003073144 A1 20030417
AI US 2002-60036 A1 20020130 (10)
PRAI US 2001-333626P 20011127 (60)
US 2001-305484P 20010712 (60)
US 2001-265305P 20010130 (60)
US 2001-267568P 20010209 (60)
US 2001-313999P 20010820 (60)
US 2001-291631P 20010516 (60)
US 2001-287112P 20010428 (60)
US 2001-278651P 20010321 (60)
US 2001-265682P 20010131 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,

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SEATTLE, WA, 98104-7092

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 14253

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly pancreatic cancer, are disclosed. Illustrative compositions comprise one or more pancreatic tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly pancreatic cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 2 OF 7 USPATFULL

AN 2002:301135 USPATFULL

TI Flowcell system for nucleic acid sequencing

IN Williams, John G.K., Lincoln, NE, UNITED STATES

Bashford, Gregory R., Lincoln, NE, UNITED STATES

PA Li-cor, Inc., Lincoln, NE (U.S. corporation)

PI US 2002168678 A1 20021114

AI US 2002-146400 A1 20020514 (10)

RLI Continuation of Ser. No. US 2001-876375, filed on 6 Jun 2001, PENDING

PRAI US 2000-209896P 20000607 (60)

US 2001-286238P 20010424 (60)

DT Utility

FS APPLICATION

LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

CLMN Number of Claims: 54

ECL Exemplary Claim: 1

DRWN 18 Drawing Page(s)

LN.CNT 2248

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides compounds, methods and systems for sequencing nucleic acid using single molecule detection. Using labeled NPs that exhibit charge-switching behavior, single-molecule DNA sequencing in a microchannel sorting system is realized. In operation, sequencing products are detected enabling real-time sequencing as successive detectable moieties flow through a detection channel. By electrically sorting charged molecules, the cleaved product molecules are detected in isolation without interference from unincorporated NPs and without illuminating the polymerase-DNA complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 3 OF 7 USPATFULL

AN 2002:272801 USPATFULL

TI Compositions and methods for the therapy and diagnosis of colon cancer

IN Stolk, John A., Bothell, WA, UNITED STATES

Xu, Jiangchun, Bellevue, WA, UNITED STATES

Chenault, Ruth A., Seattle, WA, UNITED STATES

Meagher, Madeleine Joy, Seattle, WA, UNITED STATES

PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation)

PI US 2002150922 A1 20021017

AI US 2001-998598 A1 200111116 (9)

PRAI US 2001-304037P 20010710 (60)

US 2001-279670P 20010328 (60)

US 2001-267011P 20010206 (60)

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US 2000-252222P 20001120 (60)

DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 17
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 9233

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 4 OF 7 USPATFULL
AN 2002:243051 USPATFULL
TI Compositions and methods for the therapy and diagnosis of ovarian cancer
IN Algata, Paul A., Issaquah, WA, UNITED STATES
Jones, Robert, Seattle, WA, UNITED STATES
Harlocker, Susan L., Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES, 98104 (U.S. corporation).
PI US 2002132237 A1 20020919
AI US 2001-867701 A1 20010529 (9)
PRAI US 2000-207484P 20000526 (60)
DT Utility
FS APPLICATION
LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092
CLMN Number of Claims: 11
ECL Exemplary Claim: 1
DRWN No Drawings
LN.CNT 25718

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly ovarian cancer, are disclosed. Illustrative compositions comprise one or more ovarian tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly ovarian cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 5 OF 7 USPATFULL
AN 2002:242791 USPATFULL
TI Compositions and methods for the therapy and diagnosis of colon cancer
IN King, Gordon E., Shoreline, WA, UNITED STATES
Meagher, Madeleine Joy, Seattle, WA, UNITED STATES
Xu, Jiangchun, Bellevue, WA, UNITED STATES
Secrist, Heather, Seattle, WA, UNITED STATES
PA Corixa Corporation, Seattle, WA, UNITED STATES (U.S. corporation)
PI US 2002131971 A1 20020919
AI US 2001-33528 A1 20011226 (10)
RLI Continuation-in-part of Ser. No. US 2001-920300, filed on 31 Jul 2001,

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PENDING

PRAI US 2001-302051P 20010629 (60)
US 2001-279763P 20010328 (60)
US 2000-223283P 20000803 (60)

DT Utility

FS APPLICATION

LREP SEED INTELLECTUAL PROPERTY LAW GROUP PLLC, 701 FIFTH AVE, SUITE 6300,
SEATTLE, WA, 98104-7092

CLMN Number of Claims: 17

ECL Exemplary Claim: 1

DRWN No Drawings

LN.CNT 8083

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Compositions and methods for the therapy and diagnosis of cancer, particularly colon cancer, are disclosed. Illustrative compositions comprise one or more colon tumor polypeptides, immunogenic portions thereof, polynucleotides that encode such polypeptides, antigen presenting cell that expresses such polypeptides, and T cells that are specific for cells expressing such polypeptides. The disclosed compositions are useful, for example, in the diagnosis, prevention and/or treatment of diseases, particularly colon cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 6 OF 7 USPATFULL

AN 2002:78417 USPATFULL

TI Charge-switch nucleotides

IN Williams, John G.K., Lincoln, NE, UNITED STATES
Bashford, Gregory R., Lincoln, NE, UNITED STATES
Chen, Jiyan, Lincoln, NE, UNITED STATES
Draney, Dan, Lincoln, NE, UNITED STATES
Narayanan, Nara, Greensboro, NC, UNITED STATES
Reynolds, Bambi L., Lincoln, NE, UNITED STATES
Sheaff, Pamela, Omaha, NE, UNITED STATES

PI US 2002042071 A1 20020411

AI US 2001-876374 A1 20010606 (9)

PRAI US 2000-209896P 20000607 (60)
US 2001-286238P 20010424 (60)

DT Utility

FS APPLICATION

LREP TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834

CLMN Number of Claims: 48

ECL Exemplary Claim: 1

DRWN 18 Drawing Page(s)

LN.CNT 2250

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides compounds, methods and systems for sequencing nucleic acid using single molecule detection. Using labeled NPs that exhibit charge-switching behavior, single-molecule DNA sequencing in a microchannel sorting system is realized. In operation, sequencing products are detected enabling real-time sequencing as successive detectable moieties flow through a detection channel. By electrically sorting charged molecules, the cleaved product molecules are detected in isolation without interference from unincorporated NPs and without illuminating the polymerase-DNA complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L2 ANSWER 7 OF 7 USPATFULL

AN 2002:72601 USPATFULL

TI Nucleic acid sequencing using charge-switch nucleotides

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IN Williams, John G.K., Lincoln, NE, UNITED STATES
Bashford, Gregory R., Lincoln, NE, UNITED STATES
PI. US 2002039738 A1 20020404
AI US 2001-876375 A1 20010606 (9)
PRAI US 2000-209896P 20000607 (60)
US 2001-286238P 20010424 (60)
DT Utility
FS APPLICATION
LREP TOWNSEND AND TOWNSEND AND CREW, TWO EMBARCADERO CENTER, EIGHTH FLOOR,
SAN FRANCISCO, CA, 94111-3834
CLMN Number of Claims: 54
ECL Exemplary Claim: 1
DRWN 18 Drawing Page(s)
LN.CNT 2167

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides compounds, methods and systems for sequencing nucleic acid using single molecule detection. Using labeled NPs that exhibit charge-switching behavior, single-molecule DNA sequencing in a microchannel sorting system is realized. In operation, sequencing products are detected enabling real-time sequencing as successive detectable moieties flow through a detection channel. By electrically sorting charged molecules, the cleaved product molecules are detected in isolation without interference from unincorporated NPs and without illuminating the polymerase-DNA complex.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d 12 7 kwic

L2 ANSWER 7 OF 7 USPATFULL
DETD . . . linker having a charge of +2. This nucleotide can be incorporated into DNA by a polymerase, with the release of **phosphate**, thus the **PPi-Linker-Dye** moiety acquires a more **positive** charge than the intact **.gamma.-NTP-Dye**.

=>